

## **HOME VISITING**

# Parent and Child Mental Health and Home Visiting

<sup>1</sup>Erin A. Ward, MA, MSW, <sup>1</sup>S. Darius Tandon, PhD, <sup>2</sup>Robert T. Ammerman, PhD

<sup>1</sup>Northwestern University, Feinberg School of Medicine, Institute for Public Health & Medicine, USA, <sup>2</sup>Cincinnati Children's Hospital Medical Center & University of Cincinnati College of Medicine, USA February 2022, Éd. rév.

#### Introduction

Maternal and paternal depression are prevalent among 20% of women<sup>1,4</sup> and 10% of men<sup>5,6</sup> during the perinatal period. Mental health problems (of which depression is the most common) are even more prevalent in nearly half of low-income families, given the elevated risk due to factors such as traumatic life events, low social support, adolescent or single parenthood, systemic racism, and health, economic, and education inequities.<sup>4,7,9</sup> Children of parents with depression may experience a range of negative outcomes including developmental delays, cognitive impairments, and attachment insecurity, along with increased risk for developing mental health issues.<sup>10,11</sup> Given the vast and growing number of perinatal families they serve, home visiting programs are in a unique position to address parental depression and substance abuse as well as issues that impact mental health and family well-being, including intimate partner violence. In this chapter, we focus on research related to home visiting programs' identification and responses to impact parent mental health, identify gaps in existing research, and provide recommendations for research, practice and policy communities to effectively address parental depression, substance abuse, and experiences of intimate partner violence, through home visiting.

# Subject

Home visiting focuses on fostering healthy child development by supporting positive parenting practices, including supports for parents' socioemotional and socioeconomic well-being, through direct services and referrals to other professional services in their communities. Home visiting programs are implemented in large scale across 46 countries and in limited scope among 55 countries, reflecting increasing global efforts to optimize child development, maternal health, and family well-being over the life course. 12 Research has demonstrated that up to 50% of parents served by home visiting have experienced clinically elevated levels of depression during the critical first years of their child's development.<sup>13</sup> In a recent U.S. population survey, 1 in 4 women and 1 in 10 men identified having experienced intimate partner violence, 14 with nearly 1 in 10 identifying reproductive coercion. 15 In a national telephone survey, 1 in 5 children ages 17 and under had witnessed family violence in their lifetime, with one-third of those children ages 0 to 5.16 In a recent National Survey on Drug Use and Health, 1 in 10 pregnant women surveyed reported drinking alcohol, and among that subset, 40% reported using one or more other substances in addition to alcohol. 17 Furthermore, the impact of depression, substance abuse, and intimate partner violence can have multigenerational impacts on developmental, social, education, economic, health and mental health outcomes. 10,11,21,22 Identifying parents with, or at risk for, depression and substance abuse, and those experiencing intimate partner violence, can improve family outcomes and foster healthy child development, improving multi-generation outcomes.

# **Problems**

Depression in new parents has profound and often long-term negative effects on parenting and child development. Depression can impair positive parenting practices, such as difficulty reading infant cues, struggles to meet the social and emotional needs of their children, and less tolerance of child misbehaviour.<sup>20</sup> Children of parents with depression, particularly if they are exposed in their first year, are more likely to be poorly attached to their caregivers, experience emotional and behavioural dysregulation, have difficulty with attention and memory, and are at greater risk for psychiatric disorders in childhood and adulthood.<sup>22</sup> Symptoms of depression and substance abuse, and experiences of intimate partner violence, can negatively impact engagement with home visits and connecting with referrals for parent and child services to address health, development, education and economic stability.<sup>23-25</sup> Furthermore, even when they are successfully identified and referred to mental health providers, few parents receive effective treatment.<sup>23-24</sup> A majority of surveyed home visitors perceived barriers and limited access for families to receive needed

services,<sup>25</sup> with only 1 in 5 parents connecting with designated mental health, substance abuse, and intimate partner violence referrals for needed services.<sup>26</sup>

#### **Research Context**

Recommendations for systematic depression screening and preventive interventions for perinatal women at risk for depression, <sup>27-29</sup> have guided standards of care across healthcare and human service systems, providing increased opportunities for identification and service coordination to provide appropriate, successful referrals and services. Furthermore, federally funded home visiting programs are required to meet performance measures to assess all clients for depression, to provide referrals to services for parents who screen positive for depression, as well as screening for experiences of intimate partner violence and providing referrals and IPV resources as needed. <sup>20</sup>

With home visiting's increased responsibility to effectively identify, refer, and provide enhanced services for families with mental health issues and family violence, systematic evaluation and improvement of coordinated services to optimize referrals are critical. Systemic supports for mental health consultation and mental health-related training for home visiting programs and staff improve knowledge, effectiveness, well-being and retention, all of which promote sustainability and community impact. Quality improvement collaborations have provided a clearer understanding of the necessary supports, policies, procedures, and training to maximize the impact of home visiting on parent and child mental health, along with the opportunity to promote strategy implementation, adaptation, and sustainment of effective home visiting practices. In the control of the strategy implementation, adaptation, and sustainment of effective home visiting practices.

Longitudinal studies have shown the efficacy of home visiting on maternal and child health outcomes, with maternal depression and other mental health issues remaining one of the most challenging areas of impact.<sup>25</sup> Even with commendably high rates of depression screening in home visiting, significant challenges remain to successfully connect those in need with effective mental health services.<sup>24</sup> In recognition of the prevalence of mental health challenges parents in home visiting experience, interventions aimed at preventing and treating maternal depression have been developed and tested within home visiting settings,<sup>33-40</sup> along with interventions to address substance misuse,<sup>41-43</sup> and to address intimate partner violence experiences and parent and child safety.<sup>44-48</sup> Alongside intervention development, models of trauma-informed approaches to assess adverse childhood experiences (ACEs)<sup>49</sup> and traumatic events have been developed and tested,

within the context of targeted, universal approaches to brief home visiting services. 39,40

# **Key Research Questions**

There are three key research questions:

- What is the best approach to preventing and treating depression in new parents participating in home visiting programs?
- How can home visiting have the greatest impact through systematic screening and service coordination for families experiencing mental illness, substance abuse, and intimate partner violence?
- What are the most effective approaches for home visiting programs to effectively screen,
   refer, and provide effective interventions for parents with mental health issues?

#### **Recent Research Results**

Home visiting and parental mental health

Over the past decade, as home visiting has been increasingly implemented, funded and evaluated, researchers have studied the impact of home visiting programs' screening, referral, and intervention efforts on maternal depression and other significant mental health risks and challenges, including substance abuse and intimate partner violence.<sup>23-26</sup> Results from the Mother and Infant Home Visiting Program Evaluation, which evaluated 88 home visiting programs from 12 states, showed that over 75% of home visitors rated their self-efficacy and levels of implementation support for parenting and child development outcomes highly, while less than 60% endorsed adequate implementation support to address mental health issues.<sup>25</sup> Correspondingly, home visitors who had received training to assess mental health with families were more likely to discuss these issues within home visiting practice than those who had not received specialized mental health training.<sup>25</sup>

There is evidence that parental depression can have a negative impact on the effects of home visiting programs.<sup>50</sup> Depression has been associated with negative views of parenting and limited knowledge of child development.<sup>51</sup> In the Early Head Start Research and Evaluation Project, compared with non-depressed mothers, mothers with depression showed deficits in mother-child interaction and in obtaining education and job-related goals.<sup>23</sup> However, mothers with depression also showed gains in some aspects of engaging with their children during structured tasks.

Duggan et al.<sup>50</sup> found that mothers with depression and lower levels of attachment anxiety showed improved sensitivity to child cues relative to those with higher levels of attachment anxiety and those who did not receive home visiting. The Nurse-Family Partnership model research has consistently found that mothers with low psychological resources, a construct that includes some symptoms of depression, benefit most from home visiting.<sup>52</sup> Taken together, it is evident that depression affects home visiting and family outcomes in complex ways.

Identification and response to parent mental health challenges

The U.S. federal Maternal, Infant and Early Childhood Home Visiting program has developed performance indicators and outcome measures for funded home visiting programs to screen home visiting clients for depression within three months of enrollment or birth, and to screen for intimate partner violence within six months of enrollment, using validated tools.<sup>30</sup> Furthermore, caregivers who screen positive for depression should receive a referral for mental health services, which can include mental health interventions within the home visiting program as well as external service referrals. Parents who screen positive for intimate partner violence should receive referral information for IPV resources and services. Although not a requirement, the majority of home visiting programs surveyed also screen for substance and tobacco use, and provide referrals for appropriate services and interventions,<sup>26</sup> with research guiding practice in effective service coordination, including engaging with community partners in other health and human services settings.<sup>53,54</sup> These revised standards of home visiting care in the U.S. have driven nationally scaled implementation evaluation and collaborative quality improvement efforts to support the goals of improving parent and child mental health to advance multi-generational family and community health, educational, and economic outcomes.<sup>24,25</sup>

#### Service coordination

Effective service coordination is crucial in home visiting to meet both child and parent needs, and is driven by four key components—screening, referral, linkage, and follow-up—necessitating participation by home visitors, caregivers, and service organizations, to ensure successful receipt of services for families dealing with depression, substance abuse, and intimate partner violence.

24,26 Home visiting researchers have developed service coordination models and guidance for building strong partnerships between home visiting, health care, and other community-based agencies to facilitate successful referral connections and receipt of effective interventions. 53,54

Recommendations to address family mental health needs through home visiting service

coordination include: (1) assessing current screening, referral and coordination processes, using an evidence-based approach (e.g. the Home Visiting Applied Research Collaborative Coordination Toolkit<sup>55</sup>); (2) professional development and supports for home visitors to conduct mental health-focused services with families, including training, reflective supervision, and mental health consultation; (3) participation in a collaborative home visiting quality improvement and innovation network;<sup>24</sup> and (4) partnering with researchers to identify, develop, and evaluate strategies to address needs specific to the families and communities served.<sup>56</sup> To effectively complete screening, referral, and linkage with services for home visiting families with mental health needs, health systems and community agencies should also assess service coordination, capacity, and opportunities to improve access and outreach.<sup>24,25</sup>

## Mental Health Consultation

To support the expanding roles and responsibilities of home visiting programs to identify and support families experiencing depression, substance abuse, and intimate partner violence, home visiting programs are integrating Mental Health Consultation into program operations and teams. Mental health consultant supports include staff training on mental health topics, reflective group and individual supervision, and accompaniment on home visits for individual families with identified mental health needs. 32.57.59 The federally-funded Project Launch program promotes preventive behavioral health through integration with primary care to better meet the needs of children and their families. 32.60 Many home visiting grantees have incorporated Infant Mental Health Consultants to support home visitor learning and efficacy in assessing and addressing mental health with parents and children. The vast majority (90%) of home visitors from programs with mental health consultation reported increased professional growth, knowledge about children's mental health, identification of appropriate follow-up services to meet specific parent and child mental health needs, and reduced compassion fatigue. Further innovation and evaluation in promoting partnerships between home visiting, pediatric, and community services is needed to achieve optimal outcomes for parent and child mental health. 32

# Quality improvement

Quality improvement collaborations among home visiting programs provide the opportunity to maximize the effective application and impact of mental health screening, referral, service provision, and follow-up for caregivers in need of interventions and resources to address their mental health needs. In a recent cohort of 14 home visiting programs from 8 states, the home

visiting collaborative improvement and innovation network (HV-CoIIN)<sup>61</sup> created a community of practice, support, and evaluation, to increase depression screening and connection with evidence-based services for those who screen positive for depression risk. In its first cohort, results showed increased rates of depression screening (from 84% to 96%), increased receipt of evidence-based mental health services (from 42% to 66%) and improvements in depression symptoms (from 51% to 60%) among women who accessed mental health services, including referrals to behavioral healthcare providers as well as home visitor provision of mental health interventions.<sup>24</sup> In the current, HV-CoIIN cohort, intimate partner violence has been added to the focal topics for innovation and quality improvement, with 21 states, 136 home visiting programs, and one tribal nation participating, cumulatively, since 2013.<sup>61</sup>

# Treatment and prevention of depression in home visiting

Because pregnant and new parents with depression rarely obtain effective treatment in the community, several approaches have been developed that provide treatment in the home. Ammerman and colleagues created In-Home Cognitive Behavioral Therapy (IH-CBT).<sup>62</sup> IH-CBT is a structured and manual-driven approach that is provided by a master's degree-level therapist. It is an adapted form of an evidence-based treatment for depression that has been modified for the home setting, addresses the unique needs of new mothers who are socially isolated and live in poverty, and engages the home visitor to facilitate a strong collaborative relationship in order to maximize outcomes for mothers and children. A recent clinical trial<sup>63</sup> found that mothers with major depressive disorder receiving IH-CBT alongside home visiting, relative to those receiving home visiting alone, had lower levels of diagnosed major depressive disorder at post-treatment (29.3% vs. 69.0%) and at three-month follow-up (21.0% vs. 52.6%). They also reported larger drops in self-reported depressive symptoms, increased social support, lower levels of other psychiatric symptoms and increased functional capacity. This intervention has been found to be cost-effective<sup>64</sup> and is now being disseminated as "Moving Beyond Depression."<sup>65</sup>

Beeber et al. 66 conducted a clinical trial of interpersonal psychotherapy (IPT) with 80 newly immigrated Latina mothers ages 15 years or older who were participating in Early Head Start. Participants with depression were randomly assigned to IPT treatment or a "usual care" condition. Treatment was delivered by psychiatric nurses who partnered with a Spanish interpreter. Eleven sessions were provided by the team, and five additional boosters were administered by the interpreter. Results showed significant drops in self-reported depression in the IPT relative to the usual care group that were maintained at one-month post-treatment. Furthermore, IPT delivered

to parents of Early Head Start-enrolled infants and young children showed a significant impact on positive parenting practices among low-income mothers experiencing depression symptoms, compared with mothers who did not receive IPT from a nurse home visitor.<sup>67</sup>

Segre, Brock and O'Hara<sup>68</sup> implemented six Listening Visits, either during home visits or during prenatal healthcare office visits, delivered by home visitors or obstetric clinic staff. Listening Visits focused on empathic listening, collaborative problem solving, and assessment of need for additional mental health treatment. Results indicated that women receiving the Listening Visit intervention experienced significantly reduced depression symptom severity and improved quality of life compared to women receiving standard home visiting or prenatal services, including a clinically significant reduction in depression symptoms.<sup>68</sup> Delivery of Listening Visits by non-mental health professionals at the point of care, in the participant's primary language (in this case English or Spanish), can navigate the barrier of stigma related to engaging in mental health services.

Tandon and colleagues have adapted the Mothers and Babies (MB) intervention<sup>69</sup> for use in home visiting as a depression prevention intervention. MB is a cognitive-behavioural, attachment-based intervention that can be implemented as a group or individual modality. Findings from the first RCT of Mothers and Babies groups in home visiting<sup>70,71</sup> showed depressive symptoms declined at a greater rate for intervention participants than usual care participants, with the strongest effects found at six months post-intervention, including less likelihood than usual care participants to develop a depressive episode (14.6% vs. 32.4%). Another study of MB groups in home visiting showed improvements in depression, stress, and coping, but the long-term effects waned at the 6-month post-intervention time point, indicating the need for supports to sustain positive gains.<sup>72</sup> In both of these studies, the group facilitator was a master's-level clinician. In comparison, a recent cluster RCT of MB groups in home visiting, delivered by mental health clinicians compared with paraprofessional home visitors, found that home visitor facilitators were equally effective in achieving depression symptom reduction among prenatal group participants as their mental health clinician counterparts, further supporting the efficacy of the intervention when delivered by home visitors.<sup>73</sup>

Given the predominance of individual home visits as the primary modality, MB has been adapted into a series of brief individual sessions for delivery alongside a usual home visit by home visitors, <sup>74</sup> and has shown to have a significant effect in reducing depression and anxiety symptoms at an increasing rate over time at 3 and 6 months postpartum compared with usual home visiting services. <sup>75</sup> Scaling is in progress across U.S. home visiting programs. A Fathers and Babies (FAB)

intervention has been developed and pilot tested, and is ready to scale to expanded implementation and effectiveness trials.<sup>76,77</sup>

Interventions to address intimate partner violence in home visiting

In a systematic review of home visiting effectiveness in reducing partner violence (IPV), six home visiting studies met inclusion criteria of measuring IPV as an outcome while testing interventions for women and children exposed to IPV.<sup>78</sup> Three studies showed statistically significant reductions of IPV, wherein their protocols directly addressed the partner violence and supported the abused partner.<sup>19,79-81</sup> Successful approaches included providing safety strategies, parenting support, and referral to community services, with a dual focus on preventing child abuse and further abuse to the abused parent.<sup>78</sup>

Interventions to address substance abuse in home visiting

A systematic review of 12 qualitative and three mixed methods studies assessing family-focused practices with families experiencing parent mental illness and substance abuse, emphasizes the importance of assessing need and offering services for the family as a whole, indicating that in both research and practice there are limited examples with both parents, or the whole family unit, whose perspectives and participation are included.<sup>20</sup> The TIES model (Team for Infants Exposed to Substance abuse) provides a trauma-informed approach to supporting families dealing with substance abuse, to improve child and parent outcomes, and interrupt intergenerational transmission of trauma, substance abuse, toxic stress, and other health disparities.<sup>43</sup> This two-role model pairs a master's-level social worker with the parent, in a therapeutic alliance, and an expert parenting specialist to support the mother-child relationship and promote bonding and positive parenting practices, using a strengths-based framework. In addition, the home visiting team works with participants to develop goals and support with socioeconomic stability for the family.

# **Research Gaps**

Further examination of how evidence-based practices are adapted and sustained in home visiting should identify key factors that inform best practices in scaling and sustaining effective interventions to support parent and child mental health. More research is needed on home visiting approaches and interventions that engage the family system, including both parents and other significant caregivers, to maximize positive multigenerational outcomes. Coordinated community-level strategies and partnerships across family-serving systems are needed to have the greatest

population health impact, especially among families and communities with the greatest health inequities. Finally, there is a need to better understand the long-term impacts of home visiting on parental and child mental health, and the potential for long-term quality improvement collaborations between home visiting systems and community partners to support parent and child mental health.

#### Conclusions

The scope of work and responsibility of home visiting programs and home visitors has grown significantly over the last decade. Staff need mental health training and supports for a service system that is often under-resourced. They also need up-to-date training on advances in evidence-based screening, service coordination, and interventions to support parent and child mental health within a flexible delivery system. Opportunities for population health and health equity impacts are within reach, with strong evidence supporting the impact of universal home visiting with targeted assessment, referral, and interventions to address mental health challenges. By expanding the scope of home visiting services to the whole family, home visiting can have greater impact on family mental health and well-being, as well as socioeconomic stability and health equity.

# Implications for Parents, Services and Policy

Systematic screening for depression, substance abuse, intimate partner violence, and trauma history should take place in health and human service settings where pregnant women and parents with infants and young children interact. However, there are challenges to achieving this systemic change in screening procedures, along with challenges to making effective linkages to appropriate resources, once client needs are identified. Strengthening community partnerships across systems can provide a pathway and capacity for improved service coordination and outcomes for families. To support improved service coordination within home visiting, the Home Visiting Applied Research Collaborative (HARC) provides a service coordination toolkit, 55 guided by the following principles: that service coordination collaborations be family centered, equitable, adaptable, interdisciplinary, and focused on population health. Home visiting programs need to provide training and support for home visitors to effectively address mental health during home visits. Training should provide guidance on balancing conversations about family-identified needs with discussions about mental health and other psychosocial risk factors that can impair effective parenting, child development, and family well-being. The use of reflective supervision, coaching,

and infant mental health consultation are approaches that can be used effectively to develop and maintain staff skills, while helping to better meet the mental health needs of families.<sup>32,59</sup> Research efforts to augment home visiting services with mental health interventions aimed at preventing depression, substance abuse, and intimate partner violence, need to examine mechanisms that impact intervention effectiveness and contextual factors that impact implementation and sustainability, as mental health interventions within home visiting are scaled.

#### References

- 1. Evans J, Heron J, Francomb H, Oke S, Golding J. Cohort study of depressed mood during pregnancy and after childbirth. *BMJ (Clinical research ed)* 2001;323(7307):257-260.
- <sup>2.</sup> Gaynes BN, Gavin N, Meltzer-Brody S, Lohr KN, Swinson T, Gartlehner G, Brody S, Miller WC. Perinatal depression: Prevalence, screening accuracy, and screening outcomes. *Evidence report/technology assessment (Summary)* 2005:119:1-8.
- 3. Moses-Kolko EL, Roth EK. Antepartum and postpartum depression: Healthy mom, healthy baby. *Journal of the American Medical Women's Association* (1972) 2004;59(3):181-191.
- 4. Segre LS, O'Hara MW, Arndt S, Stuart S. The prevalence of postpartum depression: The relative significance of three social status indices. *Social psychiatry and psychiatric epidemiology* 2016:42(4):316-21.
- <sup>5.</sup> Cameron E, Sedov I, Tomfohr-Madsen L. Prevalence of paternal depression in pregnancy and the postpartum: An updated meta-analysis. *Journal of Affective Disorders* 2016;206:189-203.
- 6. Paulson J, Bazemore S. Prenatal and postpartum depression in fathers and its association with maternal depression: A meta-analysis. *JAMA* 2010;303:1961-1969.
- Mayberry LJ, Horowitz JA, Declercq E. Depression symptom prevalence and demographic risk factors among US women during the first 2 years postpartum. *Journal of Obstetric*, *Gynecologic*, & Neonatal Nursing 2007;36:542-549.

- 8. Condon EM, Barcelona V, Ibrahim BB, Crusto CA, Taylor JY. Racial discrimination, mental health, and parenting among African American mothers of preschool-aged children. *Journal of the American Academy of Child and Adolescent Psychiatry* 2021;S0890-8567(21)00405-6. doi:10.1016/j.jaac.2021.05.023
- 9. Priest N, Doery K, Truong M, Guo S, Perry R, Trenerry B, Karlsen S, Kelly Y, Paradies Y. Updated systematic review and meta-analysis of studies examining the relationship between reported racism and health and well-being for children and youth: A protocol. *BMJ Open* 2021;11(6):e043722. doi:10.1136/bmjopen-2020-043722
- 10. Center on the Developing Child. *Maternal depression can undermine the development of young children (Working Paper 8)*. Boston, MA: Harvard University; 2009.
- 11. National Research Council and Institute of Medicine. *Depression in parents, parenting and children: Opportunities to improve identification, treatment and prevention*. Washington DC: The National Academies Press. 2009.
- World Health Organization. Prevention Programmes. Child Maltreatment: Extent of implementation of home-visiting programmes. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/child-maltreatment-extent-of-implementation-of-home-visiting-programmes. Accessed July 6, 2021.
- 13. Ammerman RT, Putnam FW, Bosse NR, Teeters AR, Van Ginkel JB. Maternal depression in home visiting: A systematic review. *Aggression and Violent Behavior* 2010;15:191-200.
- 14. Smith SG, Zhang X, Basile KC, Merrick MT, Wang J, Kresnow M, Chen J. The national intimate partner and sexual violence survey (NISVS): 2015 Data Brief Updated Release. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention; 2018.
- 15. Basile KC, Smith SG, Liu Y, Miller E, Kresnow MJ. Prevalence of intimate partner reproductive coercion in the United States: Racial and ethnic differences. *Journal of Interpersonal Violence* 2021;36(21-22):NP12324-NP12341. doi:10.1177/0886260519888205

- 16. Finkelhor D, Turner HA, Shattuck A, Hamby SL. Prevalence of childhood exposure to violence, crime, and abuse: Results from the National Survey of Children's Exposure to Violence. JAMA Pediatrics 2015;169(8):746-754.
- England LJ, Bennett C, Denny CH, Honein MA, Gilboa SM, Kim SY, Guy GP Jr, Tran EL, Rose CE, Bohm MK, Boyle CA. Alcohol use and co-use of other substances among pregnant females aged 12-44 years United States, 2015-2018. MMWR. Morbidity and Mortality Weekly Report 2020:69(31):1009-1014.
- 18. Austin AE, Shanahan ME, Barrios YV, Macy RJ. A systematic review of interventions for women parenting in the context of intimate partner violence. *Trauma, Violence & Abuse* 2019;20(4):498-519.
- 19. Leonard R, Linden M, Grant A. Effectiveness of family-focused home visiting for maternal mental illness: A systematic review and meta-analysis. *Journal of Psychiatric and mental Health Nursing* 2021;28(6):1113-1127. doi:10.1111/jpm.12715
- 20. Leonard RA, Linden M, Grant A. Family-focused practice for families affected by maternal mental illness and substance misuse in home visiting: A qualitative systematic review. Journal of Family Nursing 2018;24(2):128-155.
- 21. Goodman SH. Depression in mothers. *Annual Review of Clinical Psychology* 2007;3:107-135.
- <sup>22.</sup> Hay DF, Pawlby S, Waters CS, Perra O, Sharp D. Mothers' antenatal depression and their children's antisocial outcomes. *Child Development* 2010;81:149-165.
- 23. Administration on Children Youth and Families. *Making a difference in the lives of children and families: The Impacts of Early Head Start Programs on infants and toddlers and their families*. Washington, DC: U.S. Department of Health and Human Services. 2002.
- 24. Tandon SD, Mackrain M, Beeber L, Topping-Tailby N, Raska M, Arbour M. Addressing maternal depression in home visiting: Findings from the home visiting collaborative improvement and innovation network. *PLoS One* 2020;15(4):e0230211.

- 25. Duggan A, Portilla XA, Filene JH, Crowne SS, Hill CJ, Lee H, Knox V. Implementation of evidence-based early childhood home visiting: Results from the mother and infant home visiting program evaluation. OPRE Report # 2018-76A, Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services. 2018.
- <sup>26.</sup> West A, Duggan A, Gruss K, Minkovitz C. Service coordination to address maternal mental health, partner violence, and substance use: Findings from a national survey of home visiting programs. *Prevention Science* 2021;22(5):633-644.
- <sup>27.</sup> Siu AL, US Preventive Services Task Force (USPSTF). Screening for depression in adults: U.S. Preventive Services Task Force Recommendation Statement. *JAMA*, 2016;315(4):380-387.
- 28. Curry SJ, Krist AH, Owens DK, Barry MJ, Caughey AB, Davidson KW, Doubeni CA, Epling Jr JW, Grossman DC, Kemper AR, Kubik M, Landefeld CS, Mangione CM, Silverstein M, Simon MA, Tseng CW, Wong JB. U.S. Preventive Services Task Force. Interventions to prevent perinatal depression: U.S. Preventive Services Task Force Recommendation Statement. *JAMA* 2019;321(6):580-587.
- 29. Dennis CL, Dowswell T. Psychosocial and psychological interventions for preventing postpartum depression. *The Cochrane database of systematic reviews* 2013(2):CD001134. doi:10.1002/14651858.CD001134.pub3
- 30. Labiner-Wolfe J, Vladutiu CJ, Peplinski K, Cano C, Willis D. Redesigning the Maternal, Infant and Early Childhood Home Visiting Program Performance Measurement System. *Maternal and Child Health Journal* 2018;22(4):467-473.
- 31. Dauber S, Hogue A, Henderson CE, Nugent J, Hernandez G. Addressing maternal depression, substance use, and intimate partner violence in home visiting: A quasi-experimental pilot test of a screen-and-refer approach. *Prevention Science* 2019;20(8):1233-1243.
- 32. Goodson BD, Mackrain M, Perry DF, O'Brien K, Gwaltney MK. Enhancing home visiting with mental health consultation. *Pediatrics* 2013; 132 Suppl 2:S180-190.

- 33. Ammerman RT, Putnam FW, Altaye M, Chen L, Holleb L, Stevens J, Short J, Van Ginkel JB. Changes in depressive symptoms in first time mothers in home visiting. *Child Abuse & Neglect* 2009;33:127-138.
- 34. Chazan-Cohen R, Ayoub C, Pan BA, Roggman L, Raikes H, McKelvey L, Hart A. It takes time: Impacts of Early Head Start that lead to reductions in maternal depression two years later. *Infant Mental Health Journal* 2007:28:151-170.
- 35. Duggan A, Caldera D, Rodriguez K, Burrell L, Rohde C, Crowne, S.S. Impact of a statewide home visiting program to prevent child abuse. *Child Abuse & Neglect* 2007;31:801-827.
- 36. Goldfeld S, Bryson H, Mensah F, Gold L, Orsini F, Perlen S, Price S, Hiscock H, Grobler A, Dakin P, Bruce T, Harris D, Kemp L. Nurse home visiting and maternal mental health: 3-year follow-up of a randomized trial. *Pediatrics* 2021;147(2):e2020025361. doi:10.1542/peds.2020-025361
- <sup>37.</sup> Duggan AK, Fuddy L, Burrell L, Higman S, McFarlane E, Windham A, Sia C. Randomized trial of a statewide home visiting program to prevent child abuse: Impact in reducing parental risk factors. *Child Abuse & Neglect* 2004;28:623-643.
- 38. Landsverk J, Carrilio T, Connelly CD, Granger WC, Slymen DJ, Newton RR. *Healthy Families San Diego clinical trial: Technical report.* San Diego, CA: San Diego Children's Hospital and Health Center; 2002.
- 39. Mitchell-Herzfeld S, Izzo C, Greene R, Lee E, Lowenfels A. *Evaluation of Healthy Families New York (HFNY): First year program impacts*. Albany, NY: Healthy Families New York; 2005.
- 40. Molina AP, Traube DE, Kemner A. Addressing maternal mental health to increase participation in home visiting. *Children and Youth Services Review* 2020;113:105125.
- 41. Novins DK, Ferron C, Abramson L, Barlow A. Addressing substance-use problems in tribal home visiting. Infant Mental Health Journal 2018;39(3):287-294.

- <sup>42.</sup> O'Connor E, Thomas R, Senger CA, Perdue L, Robalino S, Patnode C. Interventions to prevent illicit and nonmedical drug use in children, adolescents, and young adults: Updated evidence report and systematic review for the U.S. Preventive Services Task Force. *JAMA* 2020;323(20):2067-2079.
- 43. O'Malley D, Chiang DF, Siedlik EA, Ragon K, Dutcher M, Templeton O. A promising approach in home visiting to support families affected by maternal substance use. *Maternal & Child Health Journal* 2021:25(1):42-53.
- 44. Burnett C, Crowder J, Bacchus LJ, Schminkey D, Bullock L, Sharps P, Campbell J. "It doesn't freak us out the way it used to": An evaluation of the domestic violence enhanced home visiting program to inform practice and policy screening for IPV. *Journal of Interpersonal Violence* 2021;36(13-14):NP7488-NP7515.
- 45. Davidov DM, Coffman J, Dyer A, Bias TK, Kristjansson AL, Mann MJ, Vasile E, Abildso CG. Assessment and response to intimate partner violence in home visiting: A qualitative needs assessment with home visitors in a statewide program. *Journal of Interpersonal Violence* 2021;36(3-4):NP1762-1787NP.
- 46. Feder L, Niolon PH, Campbell J, Whitaker DJ, Brown J, Rostad W, Bacon S. An intimate partner violence prevention intervention in a nurse home visiting program: A randomized clinical trial. *Journal of Women's Health (Larchmt)* 2018;27(12):1482-1490.
- 47. Hooker L, Taft AJ. Incorporating intimate partner violence interventions in nurse home visiting programs. *JAMA* 2019;322(11):1103. doi:10.1001/jama.2019.10598
- 48. Jack SM, Boyle M, McKee C, Ford-Gilboe M, Wathen CN, Scribano P, Davidov D, McNaughton D, O'Brien R, Johnston C, Gasbarro M, Tanaka M, Kimber M, Coben J, Olds DL, MacMillan HL. Effect of addition of an intimate partner violence intervention to a nurse home visiting program on maternal quality of life: A randomized clinical trial. JAMA 2019;321(16):1576-1585.
- 49. Mersky JP, Topitzes J, Langlieb J, Dodge KA. Increasing mental health treatment access and equity through trauma-responsive care. *American Journal of Orthopsychiatry*

- 2021;91(6):703-713. doi: 10.1037/ort0000572
- <sup>50.</sup> Duggan A, Berlin L, Cassidy J, Burrell L, Tandon SD. Examining maternal depression and attachment insecurity as moderators of the impacts of home visiting for at-risk mothers and infants. *Journal of Consulting Clinical Psychology* 2009:77:788-799.
- 51. Jacobs S, Easterbrooks MA. Healthy Families Massachusetts: Final evaluation report. Medford, MA: Tufts University; 2005.
- 52. Olds DL. The nurse-family partnership: From trials to practice. In: Reynolds AJ, Rolnick AJ, Englund MM, Temple JA, eds. *Childhood programs and practices in the first decade of life: A human capital integration.* New York, NY: Cambridge University Press; 2010:49-75.
- 53. Dauber S, John T, Hogue A, Nugent J, Hernandez G. Development and implementation of a screen-and-refer approach to addressing maternal depression, substance use, and intimate partner violence in home visiting clients. *Children & Youth Services Review* 2017;81:157-167.
- <sup>54.</sup> Tandon SD, Perry DF, Edwards K, Mendelson T. Developing a model to address mental health, substance use, and intimate partner violence among home visiting clients. *Health Promotion Practice* 2020;21(2):156-159.
- Mest A, Gruss K, Correll L, Duggan AK, Minkovitz CS. Service Coordination in Home Visiting: A Toolkit for Practice and Research. *Home Visiting Applied Research Collaborative*. 2018. http://www.hvresearch.org/service-coordination-toolkit/. Accessed February 2, 2022.
- <sup>56.</sup> Supplee LH, Duggan A. Innovative research methods to advance precisions home visiting for more efficient and effective programs. *Child Development Perspectives* 2019;13(3):173-179.
- 57. Boris NW, Larrieu JA, Zeanah PD, Nagle GA, Steier A, McNeill P. The process and promise of mental health augmentation of nurse home-visiting programs: Data from the Louisiana Nurse-Family Partnership. *Infant Mental Health Journal* 2006; 27(1):26-40.

- <sup>58.</sup> Weatherston DJ, Ribaudo J, Michigan Collaborative for Infant Mental Health, R. The Michigan infant mental health home visiting model. *Infant Mental Health Journal* 2020;41(2):166-177.
- 59. Heller SS, Gilkerson L. *Practical guide to reflective supervision.* Washington, DC: Zero to Three. 2011.
- 60. Administration for Children and Families. Office of Planning, Research, and Evaluation. Cross-site evaluation of Project LAUNCH (Linking Actions for Unmet Needs in Children's Health), 2008-2018. 2018. https://www.acf.hhs.gov/opre/project/cross-site-evaluation-project-launch-linking-actions-unmet-needs-childrens-health-2008. Accessed February 4, 2022.
- 61. Home visiting collaborative improvement and innovation network (HV-CoIIN) website. https://hv-coiin.edc.org Accessed February 2, 2022.
- 62. Ammerman RT, Putnam FW, Stevens J, Bosse NR, Short JA, Bodley AL, Van Ginkel JB. An open trial of in-home CBT for depressed mothers in home visiting. *Maternal and Child Health Journal* 2011;15:1333-1341.
- 63. Ammerman RT, Putnam FW, Altaye M, Stevens J, Teeters AR, Van Ginkel JB. A clinical trial of in-home CBT for depressed mothers in home visiting. *Behavior Therapy* 2013;44(3):359-372.
- 64. Ammerman RT, Mallow PJ, Rizzo JA, Putnam FW, Van Ginkel JB. Cost-effectiveness of In-Home Cognitive Behavioral Therapy for low-income depressed mothers participating in early childhood prevention programs. *Journal of Affective Disorders* 2017;208:475-482.
- 65. Moving Beyond Depression website. http://www.movingbeyonddepression.org/ Accessed February 2, 2022
- 66. Beeber LS, Holditch-Davis D, Perreira K, Schwartz T, Lewis V, Blanchard H, Canuso R, Goldman BD. Short-term in-home intervention reduces depressive symptoms in early head start Latina mothers of infants and toddlers. *Research in Nursing & Health* 2010;33:60-76.
- 67. Beeber LS, Schwartz TA, Holditch-Davis D, Canuso R, Lewis V, Hall HW. Parenting enhancement, interpersonal psychotherapy to reduce depression in low-income mothers of

- infants and toddlers: a randomized trial. Nursing Research 2013;62(2):82-90.
- 68. Segre LS, Brock RL, O'Hara MW. Depression treatment for impoverished mothers by point-of-care providers: A randomized controlled trial. *Journal of Consulting & Clinical Psychology* 2015;83(2):314-324.
- 69. Muñoz RF, Le HN, Ippen CG, Diaz MA, Urizar GG, Soto J, Mendelson T, Delucchi K, Lieberman AF. Prevention of postpartum depression in low-income women: Development of the Mamas y Bebes/Mothers and Babies Course. *Cognitive and Behavioral Practice* 2007;14:70-83.
- 70. Tandon SD, Mendelson T, Kemp K, Leis J, Perry DF. Preventing perinatal depression in low-income home visiting clients: A randomized controlled trial. *Journal of Consulting and Clinical Psychology* 2011;79:707-712.
- 71. Tandon SD, Leis J, Mendelson T, Perry DF, Kemp K. Six-month outcomes from a randomized controlled trial to prevent perinatal depression in low-income home visiting clients. *Maternal and Child Health Journal* 2012;18(4):873–881.
- McFarlane E, Burrell L, Duggan A, Tandon SD. Outcomes of a Randomized Trial of a Cognitive Behavioral Enhancement to Address Maternal Distress in Home Visited Mothers. *Maternal and Child Health Journal* 2017;21(3):475-484.
- 73. Tandon SD, Johnson JK, Diebold A, Segovia M, Gollan JK, Degillio A, Zakieh D, Yeh C, Solano-Martinez J, Ciolino JD. Comparing the effectiveness of home visiting paraprofessionals and mental health professionals delivering a postpartum depression preventive intervention: a cluster-randomized non-inferiority clinical trial. *Archives of Women's Mental Health* 2021;24(4):629-640.
- 74. Tandon SD, Leis JA, Ward EA, Snyder H, Mendelson T, Perry DF, Carter M, Hamil JL, Le HN. Adaptation of an evidence-based postpartum depression intervention: feasibility and acceptability of mothers and babies 1-on-1. *BMC Pregnancy and Childbirth* 2018;18(1):93. https://doi.org/10.1186/s12884-018-1726-0

- 75. Tandon SD, Ward EA, Hamil JL, Jimenez C, Carter M. Perinatal depression prevention through home visitation: A cluster randomized trial of mothers and babies 1-on-1. *Journal of Behavioral Medicine* 2018:41(5):641-652.
- 76. Hamil JL, Gier EE, Garfield CF, Tandon SD. The development and pilot of a technology-based intervention in the united-states for father's mental health in the perinatal period. *American Journal of Men's Health* 2021;15(5). doi:10.1177/15579883211044306
- 77. Tandon SD, Hamil JL, Gier EE, Garfield CF. Examining the effectiveness of the Fathers and Babies intervention: A pilot study. Frontiers in Psychology 2021;12:668284. https://doi.org/10.3389/fpsyg.2021.668284
- 78. Prosman GJ, Lo Fo Wong SH, van der Wouden JC, Lagro-Janssen AL. Effectiveness of home visiting in reducing partner violence for families experiencing abuse: a systematic review. *Family Practice* 2015;32(3):247-256. doi:10.1093/fampra/cmu091
- 79. Bair-Merritt MH, Jennings JM, Chen R, Burrell L, McFarlane E, Fuddy L, Duggan AK. Reducing maternal intimate partner violence after the birth of a child: A randomized controlled trial of the Hawaii Healthy Start home visitation program. *Archives of Pediatric & Adolescent Medicine* 2010;164(1):16-23.
- 80. Mejdoubi J, van den Heijkant S, Struijf E, van Leerdam F, HiraSing R, Crijnen A. Addressing risk factors for child abuse among high-risk pregnant women: Design of a randomised controlled trial of the nurse family partnership in Dutch preventive health care. *BMC Public Health* 2011;11:823.
- 81. Mejdoubi J, van den Heijkant SC, van Leerdam FJ, Heymans MW, Hirasing RA, Crijnen AA. Effect of nurse home visits vs. usual care on reducing intimate partner violence in young high-risk pregnant women: a randomized controlled trial. *PloS One* 2013;8(10):e78185.